

Janet Napolitano, Governor Stephen A. Owens, ADEQ Director



VERY UNHEALTHY (201-300)

UNHEALTHY (151-200)

UNHEALTHY FOR SENSITIVE GROUPS (101-150)

MODERATE (51-100)

GOOD (0-50)

For more information visit:

http://www.epa.gov/airnow/aqibroch

NEW!!! CLICK HERE FOR UPDATED 2008 OZONE SEASON STATS NEW!!!

AIR QUALITY FORECAST FOR MONDAY, JUNE 16, 2008

This report is updated by 1:00 p.m. Sunday thru Friday and is valid for areas within and bordering Maricopa County in Arizona

FORECAST	YESTERDAY	TOMORROW	EXTENDED	EXTENDED
<u>DATE</u>	SAT 06/14/2008	SUN 06/15/2008	MON 06/16/2008	TUE 06/17/2008
NOTICES (*SEE BELOW FOR DETAILS)	OZONE HIGH POLLUTION ADVISORY	OZONE HIGH POLLUTION ADVISORY	OZONE HEALTH WATCH	NONE
AIR POLLUTANT	Highest AQI Reading/Site (Preliminary data only)			
03*	101 SOUTH SCOTTSDALE & WEST CHANDLER	106 UNHEALTHY FOR SENSITVE GROUPS	93 MODERATE	87 MODERATE
CO*	14 WEST INDIAN SCHOOL	10 GOOD	15 GOOD	16 GOOD
PM-10*	63 CENTRAL PHOENIX	56 MODERATE	55 MODERATE	59 MODERATE
PM-2.5*	50 PHOENIX SUPERSITE	40 GOOD	42 GOOD	47 GOOD

^{*} O3 = Ozone CO = Carbon Monoxide PM-10 = Particles 10 microns & smaller PM-2.5 = Particles smaller than 2.5 microns

^{*&}quot;Ozone Health Watch" means that the highest concentration of OZONE may approach the federal health standard.

[&]quot;PM-10 or PM-2.5 Health Watch" means that the highest concentration of PM-10 or PM-2.5 may approach the federal health standard. "High Pollution Advisory" means that the highest concentration of OZONE, PM-10, or PM-2.5 may exceed the federal health standard.

[&]quot;DUST" means that short periods of high PM-10 concentrations caused by outflow from thunderstorms are possible.

<u>Health message for Sunday, June 15:</u> Active children and adults and people with respiratory disease such as asthma should limit prolonged outdoor exertion.

<u>Health message for Monday, June 16:</u> Unusually Sensitive People should consider limiting prolonged exertion outdoors.

Synopsis and Discussion

AN OZONE HIGH POLLUTION ADVISORY REMAINS IN EFFECT FOR SUNDAY, JUNE 15 And AN OZONE HEALTH WATCH HAS BEEN ISSUED FOR MONDAY, JUNE 16, 2008

There were 13 Ozone exceedances in the network on Friday, dropping to only two on Saturday. At many locations, ozone production was shut down early, around noon on Saturday. This could be attributed to the increased mixing heights allowing the local pollution and precursors to mix out more readily along with an early shift in winds from the southeast to the southwest. Typically this occurs an hour or two later than it did on Saturday. Whatever the reason may be, we'll take it. There is still an Ozone HPA in effect for Sunday, but models are suggesting that concentrations could decrease further the next couple of days. Even looking back at southern California, ozone levels are decreasing as well. Alamo Lake dropped into the "Good" range on Saturday, which is a good sign that the Valley could enjoy a break in the coming days as well. High pressure will still be in charge this week and a little Monsoon moisture from Mexico will give us a slightly "muggy" feeling in the mornings with dew points in the upper 40s. Couple that with afternoon desert temperatures above 110°F all week long! That said, today (Happy Father's Day by the way!) is also the official start of the Arizona Monsoon Season. No thunderstorms are expected this week, but it won't be long before high pressure sets up near the Four Corners region. For now, we are issuing an Ozone Health Watch for Monday, allowing the HPA to expire Sunday evening. Check back daily for the latest air quality updates. Have a great Sunday! –J.Paul

 $\frac{MONITORING\ SITE\ MAPS:\ STATIC\ MAP-\ http://www.azdeq.gov/environ/air/monitoring/images/map.ipg}{INTERACTIVE\ MAPS} - \frac{http://aqwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx}{http://www.airnow.gov/}$



POLLUTION MONITOR READINGS FOR SATURDAY, JUNE 14, 2008



O3 (OZONE)

For facts on new 8-hr ozone standard go to: http://www.epa.gov/air/ozonepollution/pdfs/2008-03-aqi-changes.pdf
For maps go to: http://www.airnow.gov/index.cfm?action=airnow.currentconditions

SITE NAME	MAX 8-HR VALUE (PPB)	MAX AQI	AQI COLOR CODE
Alamo Lake (La Paz Cour	nty) 58	49	
Apache Junction (Pinal Cour	nty) 71	87	
Blue Point	64	64	
Buckeye	52	44	
Casa Grande (Pinal Cour	nty) 64	64	
Cave Creek	70	84	
Central Phoenix	62	58	
Combs School (Pinal Cour	nty) 65	67	
Dysart	NOT AVBL	NOT AVBL	NOT AVBL
Falcon Field	71	87	
Fountain Hills	72	90	
Glendale	68	77	
Humboldt Mountain	63	61	
Maricopa (Pinal Cour	nty) 55	47	
North Phoenix	74	97	
Phoenix Supersite	72	90	
Pinal Air Park (Pinal Coun	ity) 68	77	
Pinnacle Peak	66	71	
Queen Valley (Pinal Cour	nty) 72	90	
Rio Verde	72	90	
South Phoenix	69	80	
South Scottsdale	76	101	

Tempe	69	80	
Tonto Nat'l Mon. (Gila County)	72	90	
West Chandler	76	101	
West Phoenix	67	74	
Yuma (Yuma County)	68	77	

CO (CARBON MONOXIDE)

SITE NAME	MAX 8-HR VALUE (PPM)	MAX AQI	AQI COLOR CODE
Central Phoenix	1.0	11	
Greenwood	0.9	10	
Phoenix Supersite	0.9	10	
West Indian School	1.2	14	
West Phoenix	0.2	2	

PM-10 (PARTICLES)

SITE NAME	MAX 24-HR VALUE (ug/m3)	MAX AQI	AQI COLOR CODE
Buckeye	59.9	53	
Central Phoenix	78.6	63	
Combs School (Pinal County)	NOT AVBL	NOT AVBL	NOT AVBL
Coyote Lakes	33.9	31	
Durango	47.8	44	
Greenwood	47.3	43	
Higley	48.3	44	
Maricopa (Pinal County)	NOT AVBL	NOT AVBL	NOT AVBL
Phoenix Supersite	35.9	33	
South Phoenix	53.9	49	
West Forty Third	55.1	51	
West Phoenix	44.1	40	

PM-2.5 (PARTICLES)

(Some data derived from light-scattering equipment)

For maps go to: http://www.airnow.gov//
MAX 24-HR VALUE (ug/m3)

MAX AQI

SITE NAME	MAX 24-HR VALUE (ug/m3)	MAX AQI	AQI COLOR CODE
Durango	14.1	46	
Dysart	5.2	17	
Estrella Mountain Park	7.4	24	
Phoenix Supersite	15.4	50	
Vehicle Emissions Lab	7.6	25	
West Phoenix	11.6	38	

LOCAL AIR POLLUTANTS IN DETAIL



O3 (OZONE):

<u>Sources</u> – VOCs are emitted from motor vehicles, chemical plants, refineries, factories, and other industrial sources. NOx is emitted from motor vehicles, power plants, and other sources of combustion.

<u>Potential health impacts</u> – Exposure to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate pre-existing respiratory diseases such as asthma. Other effects include decrease in lung function, chest pain, and cough.

<u>Unit of measurement</u> – Parts per billion (ppb).

<u>Averaging interval</u> – Highest eight-hour period within a 24-hour period (midnight to midnight). <u>Reduction tips</u> – Curtail daytime driving, refuel cars and use gasoline-powered equipment as late in the day as possible.

CO (CARBON MONOXIDE):

<u>Description</u> – A colorless, odorless, poisonous gas formed when carbon in fuels is not burned completely.

<u>Sources</u> – In cities, as much as 95 percent of all CO emissions emanate from automobile exhaust. Other sources include industrial processes, non-transportation fuel combustion, and natural sources such as wildfires. Peak concentrations occur in colder winter months.

<u>Potential health impacts</u> – Reduces oxygen delivery to the body's organs and tissues. The health threat is most serious for those who suffer from cardiovascular disease.

<u>Unit of measurement</u> – Parts per million (ppm).

<u>Averaging interval</u> – Highest eight-hour period within a 24-hour period (midnight to midnight) <u>Reduction tips</u> – Keep motor vehicle tuned properly and minimize nighttime driving.

PM-10 & PM-2.5 (PARTICLES):

<u>Description</u> – The term "particulate matter" (PM) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are referred to as "fine" particles and are responsible for many visibility degradations such as the "Valley Brown Cloud" (see http://www.phoenixvis.net/). Particles with diameters between 2.5 and 10 micrometers are referred to as "coarse".

<u>Sources</u> – Fine = All types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Coarse = crushing or grinding operations and dust from paved or unpaved roads.

<u>Potential health impacts</u> – PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis.

Units of measurement – Micrograms per cubic meter (ug/m3)

Averaging interval – 24 hours (midnight to midnight).

Reduction tips - Stabilize loose soils, slow down on dirt roads, carpool, and use public transit.

{ Updated 08/14/2007 }